



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/588,018

08/01/2006

Tomoyuki Horiguchi

SEY-06-1218

1266

35811 7590 11/20/2008  
IP GROUP OF DLA PIPER US LLP  
ONE LIBERTY PLACE  
1650 MARKET ST, SUITE 4900  
PHILADELPHIA, PA 19103

EXAMINER

TORRES VELAZQUEZ, NORCA LIZ

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

11/20/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/588,018	<b>Applicant(s)</b> HORIGUCHI ET AL.	
	<b>Examiner</b> Norca L. Torres-Velazquez	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 27 is/are rejected.
- 7) ☒ Claim(s) 22-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>111506</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed November 15, 2006 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but some of the information referred to therein has not been considered.

### ***Claim Objections***

2. Claims 22-26 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, claims 22-26 have not been further treated on the merits. It is noted that a multiple dependent claim may not serve as a basis for any other multiple dependent claim, either directly or indirectly.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 1794

**4. Claims 1-2, 4, 6-7, 10-13, 17-21 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by TANAKA et al. (US 2005/0118394 A1) which was published on June 02, 2005 and filed Nov. 10, 2004.**

TANAKA et al. discloses an artificial leather sheet substrate that comprise a united laminate structure of a nonwoven fabric layers A and a knitted or woven fabric layer B and an elastic polymer C impregnated into to united laminate structure. The nonwoven fabric layer A and the knitted or woven fabric layer B are strongly bonded to each other by entanglement. (Abstract)

The Examiner equates the nonwoven fabric layer A to the ultrafine fiber layer of the present invention; the knitted or woven fabric layer B is equated to the claimed woven or knitted fiber layer.

The nonwoven fabric layer A is made of microfine staples having a fiber length of 18 to 110 mm and a single fiber fineness of 0.0003 to 0.4 dtex. [0018] The knitted or woven fabric layer B is made of microfine filaments crimped. [0019] The reference also teaches that that knitted or woven fabric is preferably made of multifilament having a twist number of 10 to 650 twists/m and having a fiber fineness of 3.5 dtex or less. [0031] It is the Examiner's interpretation that the values disclosed by the reference meet the claimed twist coefficient K as claimed in the present invention. The reference teaches entangling the knitted or woven fabric and the web layer A by a needle punching and/or high-pressure stream of water. [0026] The microfine staples are formed of polymers such as polyesters including polyethylene terephthalate (PET), polytrimethylene terephthalate (PTT). [0036] The polymer for constituting the microfine filaments in the knitted or woven fabric layer B includes polyesters such as PET and PTT.

Art Unit: 1794

[0038] The reference further teaches the use of microfine fiber-forming composite fibers in the knitted or woven fabric layer that may be in a sea-island or sheath-core structure. (Refer to [0064]) With regards to claim 13, the reference teaches that at least one of the surfaces is napped. (Refer to [0138], [0104]). With regards to claims 17-18, the reference teaches the inclusion of pigment particles with particles size of aggregates of 20 to 200 nm [ $0.02-0.2\ \mu\text{m}$ ]. The reference also teaches the inclusion of fine particles in addition to the pigment. (Refer to [0043]-[0044]) The reference further teaches that the nonwoven fabric layer A preferably has a mass per unit area of 200-500 gsm and the knitted or woven fabric layer B 20-200 gsm. [0088] The method of making the artificial leather includes steps of producing the web, a step of forming an united laminate structure of web and knitted or woven fabric by entanglement and also includes a shrinking treatment. (Refer to [0046]-[0083])

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 5, 8 and 14-16 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over TANAKA et al. (US 2005/0118394 A1).**

Although TANAKA et al. does not explicitly teach the claimed properties of abrasion loss, elongation ratio and elongation recovery ratio it is reasonable to presume that these properties are inherent to artificial leather of TANAKA et al. Support for said presumption is

Art Unit: 1794

found in the use of like materials (i.e. similar laminate construction that comprises a woven or knitted layer that includes multicomponent fibers with twist entangled with an ultrafine fiber layers and utilizes similar polymeric materials). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed properties of abrasion loss, elongation ratio and elongation recovery ratio would obviously have been present once the laminate product of TANAKA et al. is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection made above under 35 USC 102. Reliance upon inherency is not improper even though rejection is based on Section 103 instead of Section 102. *In re Skoner, et al.* (CCPA) 186 USPQ 80

**7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over TANAKA et al. (US 2005/0118394 A1) as applied to claim 1 above, and further in view of JP 2001-96658.**

TANAKA et al. is silent to the fiber cross section of the fibers. The JP'658 reference is also directed to fiber sheets for fabric leather products that contain woven knitted goods intertwined with flat extra fine fibers with a degree of at least 4.0. (Refer to Abstract) Thus, it would have been obvious to one having ordinary skill in the art of leather products to use flat fibers motivated by the desire of producing materials with excellent strength and firm retention as taught by the reference.

**8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over TANAKA et al. as applied to claim 1 above, and further in view of KATO et al. (US 4,476,186).**

KATO et al. relates to an entangled nonwoven fabric having a fiber structure that comprises ultrafine fiber bundles in which the fine bundles in the grain are densely entangled with one another, and it is not seriously deformed under application of in-use tensional forces

Art Unit: 1794

and has good retention even when resin is not applied to the lower layer. (Refer to Abstract; Col. 5, lines 16-30) The reference teaches that a polyurethane elastomer resin may be applied depending upon the intended application of the sheet. Where flexibility and soft touch are required such as in apparel, preferred structures are those in which the resin is applied in a progressively increasing amount towards the surface of the grain. (Refer to Col. 5, lines 46-64)

Thus, it would have been obvious to one having ordinary skill in the art of artificial leather sheets to use a polymeric elastomer resin for the purpose of providing flexibility and soft touch, however, in application where such properties are not required the exclusion of such resin would be obvious particularly when entangled materials have shown good retention even without the inclusion of an elastomeric resin. A reference may be understood by the artisan as suggesting a solution to a problem that the reference does not discuss. See KSR, 137 S. Ct. at 1742, 82 USPQ2d at 1397 “Common sense teaches... that familiar items may have obvious uses beyond their primary purposes, and in any cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle. ... A person of ordinary skill is also a person of ordinary creativity, not an automaton.”).

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

IKEDA et al. (US 4,146,663) - discloses a composite fabric, useful as a substratum for artificial leather that comprise a woven or knitted fabric and at least on non-woven fabric firmly bonded to the woven or knitted fabric. The reference discloses the use of fibrous webs that consists of numerous extremely fine fibers having an average diameter of from 0.1 to 6.0 microns and these are entangled with the woven or knitted fabric by fluid jets. (Refer to Abstract; col. 5, lines 28-44) The extremely fine fibers have an average diameter of 0.1 to 6.0 microns, which corresponds to a denier in a range of about 0.0001 to about 0.35. [*this is equivalent to 0.0001-0.39 dtex*]. (Refer to Col. 5, lines 60-63) The fibers of the woven or knitted fabric constituent may be composed of polyester fibers. (Refer to Col. 8, lines 33-41) However, the reference is silent to the use of conjugate fibers in the woven or knitted fabric.

Art Unit: 1794

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-5:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Norca L. Torres-Velazquez/  
Primary Examiner, Art Unit 1794

November 6, 2008